


BROADBAND EXPANSION GRANT APPLICATION

For Fiscal Year 2022

<p>Primary Applicant (Name and Address):</p> <p>Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc. ("Spectrum" or "Charter") 1320 N Dr. Martin Luther King Jr. Drive Milwaukee, WI 53212 Attn: Celeste Flynn 414-277-4193 Celeste.flynn@charter.com</p>	<p>Applications MUST be UPLOADED to ERF via the Commission's website, http://psc.wi.gov/apps35/ERF_upload/content/mymenu.aspx. Refer to section 2.3 for detailed instructions.</p> <p>Applications are due and MUST be uploaded to ERF no later than: March 17, 2022 at 4:00pm (16:00) Central Time. Late applications will not be accepted.</p>
	<p>Contact for further information: PSCStatebroadbandoffice@wisconsin.gov</p>
	<p>Date: December 1, 2021</p>
<p>The Public Service Commission of Wisconsin is seeking applications for Broadband Expansion Grants. The Commission may award one or more grants during Fiscal Year 2022 to public and private entities that meet the eligibility requirements set forth in Wis. Stat. § 196.504. This grant round will be funded with bond proceeds authorized by the Wisconsin Building Commission pursuant to Wis. Stat. § 13.48(30). As such, successful applicants are subject to the requirements of Wis. Stat. § 13.48(30). Successful applicants will demonstrate a clear and achievable plan to improve broadband communications services in one or more underserved areas in the State.</p>	
<p>Applicant Certification: In signing this application, the undersigned verifies under penalty of perjury that the Applicant and its employees and agents have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition with respect to this application; that no attempt has been made to induce any other person or firm to submit or not to submit an application; that this application has been independently arrived at without collusion with any other proposer, competitor or potential competitor; that this application has not been knowingly disclosed prior to the opening of applications to any other applicant or competitor; that all of the responses and representations of Applicant in this application are true and correct to the best of the undersigned's knowledge, information, and belief; and that Applicant agrees to, accepts, and will comply with all of the terms and conditions respecting this application and any award of a broadband expansion grant as may be established in a grant award Agreement.</p>	
<p>Name of Authorized Representative (Type or Print)</p> <p>Joseph J. Sherer II</p>	<p>Title:</p> <p>Vice President, Regional Engineering of Charter Communications, Inc., the Manager of the Applicants</p>
<p>Phone: (608) 467-9202</p>	
<p>Signature of Authorized Representative</p> 	<p>Date</p> <p>3/17/2022</p>

SUMMARY OF GRANT APPLICATION

Primary Applicant Name Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc. ("Spectrum" or "Charter")	Amount of Broadband Grant Request (round to nearest dollar) \$6,198,632
Federal Employer Identification No. Spectrum Mid-America, LLC: 43-1857213 Spectrum Mid-America WI-FY2022, LLC: 88-1251860	Amount of Matching Funds Pledged (round to nearest dollar) \$3,500,000 Charter \$1,000,000 Dane County Total: \$4,500,000
Contact Name and Title Celeste Flynn, Director, Govt. Affairs	Total Cost of Proposed Project (round to nearest dollar) \$10,698,632
Telephone Number (414)277-4193	Project Name BB App Spectrum, Dane County
E-mail Address(es) celeste.flynn@charter.com	Type of Proposed Broadband Service (FTTH, Cable, DSL, etc.) FTTP EPON
Grant Manager, if different than Primary Applicant N/A	Type of Proposed Project (Last-mile, Middle-Mile, backbone, other) Last-Mile
Grant Manager Contact Name	Grant Manager Email Address and Telephone Number
If the application proposes a public-private partnership, list the names, addresses, and FEINs of the partner companies or organizations Public Partner Name: Dane County Attn: Carrie Springer, Title - Government Affairs Director Address: - 210 MLK Jr Blvd, Madison, WI 53703 FEIN Number: - 39-6005684	
Brief Project Description (2 sentences) Charter requests a grant to support the construction of a new last-mile fiber-to-the-premises ("FTTP") via Ethernet passive optical network ("FTTP EPON" or "EPON") to provide high-speed broadband access to approximately 1000 unserved and underserved locations in Dane County. Charter does not request any funding to support its existing network infrastructure.	
Maximum Proposed Download Transmission Speed 1000 Mbps (Scalable to higher Gig speeds in the future)	Maximum Proposed Upload Transmission Speed 500 Mbps (Scalable to 1000 Mbps / 1 Gig or higher in the future)

Minimum Proposed Download Speed to Customer Location 200 Mbps (30 Mbps – Spectrum's low income offering)	Minimum Proposed Upload Transmission Speed to Customer Location 10 Mbps (4 Mbps – Spectrum's low income offering)
County or Counties served by this project Dane	Community or Communities served by this project Town of Berry, Town of Springdale, Town of Springfield, Town of Vermont, Town of Perry
List of the broadband service providers, if any, currently serving the area the applicant proposes to serve Frontier, Mount Horeb Telephone Company, TDS	
Does proposed project serve an <u>unserved</u> area of the State, as defined in <u>Section 1.4</u> of the application instruction? (yes/no) Yes	Is the Applicant certified as a Broadband Forward! Community or Telecommuter Forward! Community, or does the grant project propose to serve a Broadband Forward! Community or Telecommuter Forward! Community? (yes/no) YES – Towns of Berry and Spring Dale
For last mile projects or component the expected number of Business Locations that will have access to the improved broadband service (i.e., total business locations passed or with new service access). 25	For last mile projects or components the expected number of Residential Locations that will have access to the improved broadband service (i.e., total residential locations passed or with new service access). 975
Of the improved business locations, how many locations are <i>unserved</i> ? 1	Of the improved residential locations, how many are <i>unserved</i> ? 29
For providers that are eligible telecommunications carriers will the proposed broadband service be available to Lifeline customers? (yes/no) N/A	Are there any programs available for low-income households to access low-cost service or discounts? (yes/no) Yes
Is the internet service provider currently participating in the Emergency Broadband Benefit Program? (yes/no) Yes and through its successor program the Affordable Connectivity Program (ACP)	Is the internet service provider currently participating in the Department of Public Instruction and CESA purchasing's Digital Learning Bridge? (yes/no) Yes
Did the internet service provider participate in the Public Service Commission's voluntary Broadband Coverage Data Collection in 2021? (yes/no) Yes	

FY22 Broadband Expansion Grant Application

Budget & Income Summary



Please complete this form using Microsoft Excel. A PDF copy must be attached to your application as page four. In addition, this form must also be uploaded to ERF in Excel format.

Grant Summary

Grant Applicant:	Project:
Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc.	BB App Spectrum, Dane County

Budget

Line:	Description / Category:	Grant Funds:	Match:	Total:
1	Contractual, Consultant Fees	\$ 4,590,213.00	\$ 3,332,341.00	\$ 7,922,554.00
2	Equipment	\$ 1,608,419.00	\$ 1,167,659.00	\$ 2,776,078.00
3	Supplies			\$ -
4	Labor (Salary, Fringe)			\$ -
5	Permitting, Licensing Fees			\$ -
6	Travel			\$ -
7	Other			\$ -
Total:		\$ 6,198,632.00	\$ 4,500,000.00	\$ 10,698,632.00
				42.1% match requested

Pledged Contributions

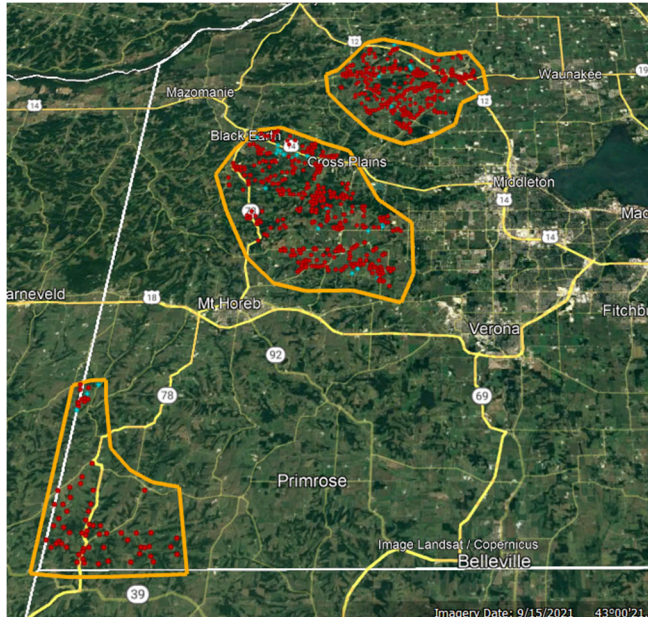
#:	Entity:	Entity Type:	Pledge Type:	Pledge:
1	Spectrum Mid-America, LLC and its subsidiary Spectrum Mid-America WI-FY2022, LLC, each managed by Charter Communications, Inc.	Applicant	Cash	\$ 3,500,000.00
2	Dane County	Partner	Cash	\$ 1,000,000.00
3				
4				
5				
6				
7				
8				
9				
10				
Total:				\$ 4,500,000.00

These costs do not include certain direct and indirect costs, reflecting contributions to the Project by Charter personnel that Charter is proposing to absorb itself, and for which this application does not seek grant funding. Project costs are limited to direct expenses for materials and contractor labor, only allowable expenses are included. All network builds and expansion will be fully owned by Charter. Funds requested in this Application will be used solely for the purpose of constructing and installing new broadband infrastructure throughout the designated grant area. While the Project will utilize and leverage existing facilities and assets to deliver broadband service to the Project area, Charter is not seeking funding for any portion of its existing asset base. No grant funds will be used for subsidizing operating costs.

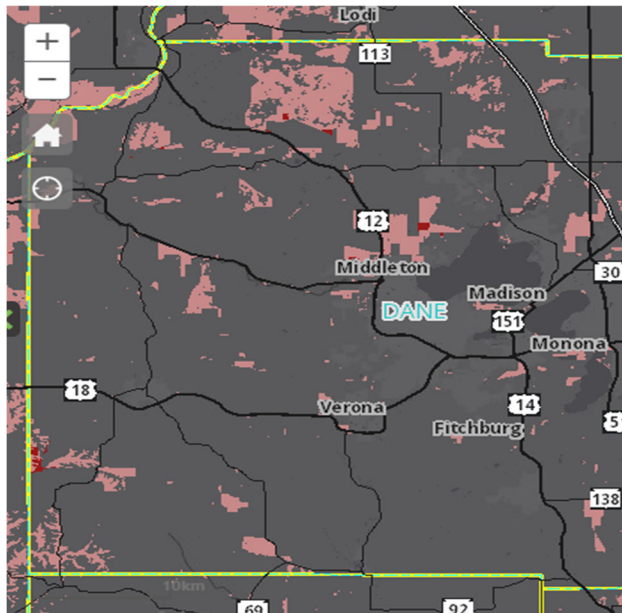
Description of the Project Area to Be Served

The proposed Project Area is within the Town of Berry, Town of Springdale, Town of Springfield, Town of Vermont, and Town of Perry in Dane County. The Project includes building nearly 200 miles of fiber optic network to connect an estimated 1000 underserved homes, businesses and community anchor institutions. A map of the proposed Project Area is shown below, along with the associated eligibility map.

Project Area:



State Eligibility Map



I. Executive Summary of the Project

Dane County, in collaboration with Charter is requesting a grant to construct a last-mile fiber-to-the-premises (“FTTP”) via Ethernet passive optical network (“FTTP EPON” or “EPON”) to provide service to unserved and underserved households in Dane County (the “Project”). The proposed Project Area is within the Town of Berry, Town of Springdale, Town of Springfield, Town of Vermont, and Town of Perry. **The Project includes building nearly 200 miles of fiber optic network to connect an estimated 1000 underserved homes, businesses and community anchor institutions.**

The Project will use Charter’s FTTP EPON architecture, a standardized and mature model that is operated by Charter across the country, engineered and managed to meet 1 Gbps downstream speeds, 500 Mbps upstream speeds (and engineered to be scalable to higher speeds in the future), and latency of well below 100 milliseconds. Charter’s FTTP EPON deployment is relevant and suitable for remote learning and remote working, offering very high bandwidth and low latency service attributes that accommodate numerous members of a household or small business simultaneously using bandwidth-intensive applications, such as video conferencing, telemedicine, video streaming, gaming, virtual or augmented reality sessions, and numerous other applications. New customers in the Project Area will have access to several Internet speed options, including Charter’s “Spectrum Internet” with a standard starting speed of up to 200/10 Mbps and Charter’s “Internet Gig” service at up to 1000/500 Mbps. Additional services that will be available to Charter Internet customers include, but are not limited to, anti-virus security protection and in-home WiFi. As an added benefit of its FTTP network, Charter will also be in a position to offer competitive video, mobile and voice services in the grant area.

Because Charter has a well-established process for initiating and overseeing new construction projects, existing relationships with contractors to perform design, make-ready and construction work, and holds numerous regulatory authorizations and pole attachment agreements that can facilitate prompt access to rights-of-way and utility poles, it anticipates that it would be able to start work on the Project promptly upon approval. If awarded grant funds, Charter anticipates beginning the project promptly with completion within the project period of up to 24 months, subject to timing of grant awards. Any delay in meeting that time frame related to pole attachment make-ready work required to install facilities, permitting, ability to access relevant locations, or other issues outside Spectrum’s reasonable control, including pandemic-related or raw materials shortages, would promptly be brought to the attention of the PSC in order to secure additional time to complete the Project.

II. Priority Factors

a. Matching Funds

Charter estimates the direct cost of this network construction at \$10,698,632, and requests a \$6,198,632 (58%) grant to complete the Project. Charter and Dane County would contribute the remaining cost to complete the Project—a contribution of \$3,500,000 from Charter; and \$1,000,000 from Dane County, a combined \$4,500,000, or 42% of the Project’s up-front, direct construction costs. In addition, Charter will absorb all indirect costs and all operational costs of the Project going forward.

Charter’s commitment to contribute or absorb substantial costs associated with the Project, and seek grant funding for only a portion of the direct construction costs for the new network facilities, results in a budget that will leverage Charter’s existing resources, maximize the impact of grant funds, and streamline grant administration due to the limited nature of the expenditures for which Charter is seeking reimbursement.

Charter will be able to leverage its substantial existing internal resources and expertise to provide its management and supervision of the Project, and is not seeking reimbursement of its costs associated with project administration or any design, coordination, and other tasks that will be carried out by Charter internal employees within its construction, engineering, and field operations organizations. In addition to increasing the cost-effectiveness of state funds, Charter's commitment to limit the expenses included in the budget will simplify administration of the grant and verification that grant funds are expended only for allowable costs.

As set forth in the accompanying budget spreadsheet and justification, the Project includes within its proposed budget only a limited set of Charter's estimated direct, verifiable costs of construction. These consist of estimated material costs; direct contractor labor to carry out design, make-ready, and construction work; and licensing/permitting expenses. As previously stated, indirect costs and certain other direct costs associated with the effort—such as the contributions by Charter's internal employees on project design, supervision, and management—will be absorbed by Charter as part of its regular operations.

The network will also be backed and operated by Charter, the nation's second-largest broadband provider with extensive experience owning, operating, maintaining, and upgrading broadband networks, as well as well-recognized financial stability. Charter's financial resources and recognized, investment-backed commitment to rural America provide reassurance that Charter will be able to carry out the terms of the grant and continue to operate the system going forward. While these resources and assets are essential for the Project's success, Charter is not requesting any grant funding or support for its existing assets or facilities.

b. Public-private partnership

Proposed Joint Project Between Dane County and Charter

The Project will be a joint effort between Dane County and Charter, with Charter acting as the primary applicant and assuming responsibility for the construction and operation of the proposed network.

Dane County is actively engaged with the Project, and will:

- Providing assistance to Charter to ensure permitting and approvals happen in a timely matter.
- Two of the towns within the project regions are Broadband Forward Communities.
- Provide staff to facilitate and coordinate permitting and approvals - Dane County has a staff member from the Planning and Development Department assigned to the Broadband Task Force, which was set up by the Dane County Board to help ensure Dane County communities have the what they need to apply for grants to expand broadband. As this application includes numerous townships, this staff member can help facilitate and coordinate the permitting and approvals in the three areas of the application. Once the project is complete, the three county supervisors and the Dane County Broadband Task Force can all help ensure area residents know of the new services available. Both the Dane County Board and the County Executive's office have a staff member assigned to help facilitate this project as well.
- Support the project through collaborative oversight, community engagement, facilitating installation operations, and direct marketing activities.
- Consult with Charter to verify build-to-location data in the proposal, including final verification of Project locations.

- **Support Removal of Regulatory Barriers.** Charter, as described below, is well versed in managing the regulatory processes associated with the deployment of its broadband network. Nonetheless, sometimes obstacles arise that are beyond Charter's control, such as local permitting issues, pole attachments, and access to rights-of-way and easements. To the extent it is within its scope of authority, Dane County will work with Charter to coordinate removal of these obstacles.

Charter, described in more detail below, is an experienced service provider and a leading broadband company, and is well-versed and experienced in abiding by all necessary federal, state, and local requirements that are impacted during the build out and expansion of its network. Charter's role in the Covered Partnership will consist of:

- **Construction Management:** If the Project is selected for a grant, Charter will work with Dane County to verify Project data regarding unserved and underserved households and businesses, secure the necessary permits, pole attachments, and other authority as necessary to support the Projects. In addition, Charter will complete the construction plan (including timeframes and costs) and manage all other aspects of the construction effort, maintenance of the system, and customer intake and service delivery. All networks builds and expansion will be fully owned by Charter or a Charter affiliate.
- **Commitment of Funds and Personnel:** If the Project is selected for a grant, Charter will contribute substantial private financial and operational resources to ensure the success of the Project, consisting of:
 1. A direct cash contribution to the direct design, construction, and licensing and permitting costs for the Project (a commitment estimated at \$3,500,000, or 33% of the estimated direct construction costs of the Project);
 2. A contribution of all indirect costs of the Project, which Charter will absorb itself; and
 3. By absorbing all other direct costs of the Project not captured in the direct design, construction, and licensing/permitting costs, including supervision and management of the effort by Charter personnel.
- **Collaborating on Community Engagement:** Work with Dane County to assist with digital literacy and broadband adoption strategies.

Letters of Commitment for each member of the partnership, setting forth their respective roles, are attached to this application as **Exhibit A**.

c. Existing broadband service

Our partners from Dane County offer the following input:

MadRep has been gathering speedtest data for Dane County for only a short time and already the data show the speed available in these areas is very low. A pdf of the data submitted so far is included in the letter sections. We have testimonies from school districts and residents collected by the Dane County Broadband Task Force showing slow speeds, service that is too expensive and unreliable, or a complete lack of service. All of this is included in the letters section. Precise location data can be provided to the PSC from the MadRep tests if requested.

Current Competitor Speeds in Project Area

Wireline Carrier*	FCC Tier	Tech Type	Max Down Speed	Max Up Speed	Census Block Count	% of Project Census Blocks**
Frontier Communications Corporation	<= 25 Mbps	DSL	6	1	11	4.4%
Frontier Communications Corporation	> 100 and <= 500 Mbps	DSL	25	7	2	0.8%
Mount Horeb Telephone Company	<= 25 Mbps	DSL	100	3	22	8.8%
Telephone and Data Systems, Inc.	<= 25 Mbps	DSL	40	5	134	53.4%
Telephone and Data Systems, Inc.	> 25 and <= 100 Mbps	DSL	940	15	55	21.9%

*Competitors who do not specify speeds are not included in list.

**Does not total 100% as multiple competitors can overlap and some census blocks may be unserved

Source: FCC Broadband 477 database Dec 2020; Map: Tableau using project area census blocks

d. Project impact

Service Offerings and Price

Upon completion, residents in the proposed Project Area will have access to Charter's Spectrum Internet Gig service (up to 1000/500 Mbps). With Spectrum Internet, customers can simultaneously stream videos, download music and more without sacrificing performance. Spectrum provides free modems and the fastest, most powerful in-home WiFi to do more on more devices.

Charter employs a nationwide pricing structure (called Spectrum Pricing & Packaging), which offers standardized pricing for each tier of broadband internet service Charter offers new customers across its service territory. Charter's pricing strategy ensures that rural customers receive the same pricing as other highly competitive areas in the state. Charter's wireline broadband offerings currently include no data caps, usage-based pricing, early termination or modem fees.

Current prices for Charter's Spectrum Internet Assist, Spectrum Internet, and Spectrum Internet Ultra service tiers, and its planned pricing for the Spectrum Internet Gig service tier, are as follows:¹

Table 1: Standard Charter Wireline Residential Broadband Service Offerings and Prices

Speed Tier ²	Downstream Mbps	Upstream Mbps	Standard Monthly Rate – without Promotional Pricing ³	Installation Fee
Spectrum Internet Assist ⁴	30	4	\$17.99	\$0.00 ⁵
Spectrum Internet	200	10	\$74.99	\$49.99
Spectrum Internet Ultra	400	20	\$94.99	\$49.99
Spectrum Internet Gig	1000	500	\$114.99	\$49.99

In addition to the standard, non-promotional rates itemized above, Charter may also offer promotional pricing, including bundled discounts. Charter's current promotional offerings can be

¹ All rates, speeds and terms of service stated herein are subject to change.

² Represented pricing is for wireline residential broadband service only. In addition to wireline broadband services, Charter will also offer video, voice, and mobile services in the grant area.

³ Customers can add WiFi for \$5.00 per month (Spectrum Internet Assist, Spectrum Internet & Spectrum Internet Ultra).

⁴ Spectrum's Internet Assist program provides 30 Mbps broadband to qualified families with children on the National School Lunch Program or seniors receiving supplemental income.

⁵ For self-installation only. Additional fees may apply for professional installation.

found at <https://www.spectrum.com/internet>.⁶ Spectrum's terms of service will apply to all tiers of service. In addition to wireline broadband services, Charter will also offer video, voice, and mobile services in the grant area.

Low Income Programs

Spectrum has engaged in several initiatives and established numerous business practices that benefit consumers in need and demonstrate our commitment to the community. As described below, Spectrum has established several programs to provide low cost internet service particularly for students and remote learning, has assisted customers struggling to pay their bills for service, and supported communities by providing good paying jobs and long-term careers, and strengthening local organizations. Charter's current programs are described below.

Just recently Charter announced an enhanced affordability solution called "Internet 100" for \$29.99, which is tied to the federal government's new Affordable Connectivity Program (ACP). Customers qualifying for ACP in Wisconsin will be eligible to receive a new low-cost, low-income product offering of up to 100Mbps download and 10Mbps upload for less than the monthly \$30 ACP subsidy. This service will remain available for the duration of the ACP.⁷ For the duration of the ACP, Charter also currently plans to continue offering Spectrum Internet Assist to customers who meet the eligibility and prefer to purchase that service.

- **Stay Connected K-12 Program:** To help address the lack of Internet connectivity faced by some student households, through the Stay Connected K-12 program, Spectrum is working directly with schools and school districts across its footprint to assist them in offering high-speed, cable broadband Internet access to students, educators, and staff in their homes. Spectrum is currently connecting thousands of students and educators through this program across the Country. This product offering helps to ensure that learning, teaching, and working are uninterrupted by giving schools and school districts the flexibility to add students to the program when needed, and provide much-needed in-home connectivity at speeds up to 50 Mbps/5 Mbps. To date, Spectrum has established such relationships with school districts in Wisconsin and 18 other states, including Alabama, California, Colorado, Connecticut, Florida, Georgia, Idaho, Indiana, Kentucky, Maine, Massachusetts, Minnesota, Missouri, New York, Ohio, Oregon, Texas, and Washington.
- **Bulk Rate Solution to Bridge Digital Divide:** Charter now also offers a bulk rate partnership opportunity for counties, municipalities, housing authorities, or other local entities to identify homes in underserved areas and provide them with a heavily discounted bulk rate for Spectrum's Internet service offering. If the County is interested in exploring a bulk rate discount program, Spectrum is happy to further discuss this at the appropriate time.

⁶ All promotional offers are subject to change and may not be available in all areas or to all customers.

⁷ The discount is up to \$75 per month in Tribal Lands. The ACP is limited to one monthly service credit per household. Other program qualifications and restrictions may be found at www.spectrum.net/support/internet/affordable-connectivity-program. Terms and conditions of product service and offering may be subject to change.

e. Scalability

Charter's participation in the Federal Communications Commission's Rural Digital Opportunity Fund (RDOF) rural broadband expansion program will allow significant synergies with Charter's existing infrastructure and scalability in connection with this Project. Charter's RDOF will add 4,612⁸ additional locations in Dane County beyond what the proposed Project would provide.

Charter's network design offers scalability that non-wireline offerings cannot match. The FTTP EPON architecture proposed for the Project will scale to support customer growth and data usage growth for (a) ever increasing application requirements; (b) increasing quality demand; and (c) lower response/latency demands for ever increasing usage of highly interactive applications.

FTTP EPON technologies leverage fiber optic cables that provide vast amounts of bandwidth over a very low loss transmission medium. Fiber backbones operated by the largest communications companies in the world, such as Charter, rely on fiber optic cables to carry Terabits per second of traffic in a single fiber strand. This same technology concept is applied in the last mile FTTP architecture, providing growth support for decades to come. Scalable elements also include routers and switches that support higher speeds and services.

As Charter adds customers over time and as customers consume more bandwidth, Charter's scalable model and proven capacity management processes will accommodate this growth. While Charter will be building a new last mile FTTP EPON network in the Project Area, this last mile network will be connected to Charter's existing robust and scalable network tiers, which are already in place and ready for growth. Charter augments its capacity through normal operating procedures, and these procedures will extend to the proposed Project Area seamlessly.

In addition, recognizing the importance of fast, reliable service for community institutions, **Charter also offers up to 100 Gbps symmetrical speeds to large businesses, schools, libraries, hospitals, and other important community institutions through customized dedicated builds by its Spectrum Enterprise business organization.** The present application and proposed budget do not include the costs of such customized builds; however, Charter's network presence in the project area would better position the company to make such offers available.

f. Economic development

Our partners from Dane County offer the following input:

Internet access and speeds in the rural eastern half of Dane County are much more limited than Madison and the surrounding suburbs. This prevents many businesses from even considering locating in these areas and puts the rural areas of the county at a disadvantage when they are trying to promote economic development and expand their property tax base. The Dane County task force heard from residents, school districts, and local government leaders about their frustrations trying to get better internet access and some have asked providers to improve the service, but have been denied. The lack of access is also a problem for area school children and one town even noted some parents rented office space in order to get their children enough bandwidth for online learning. The attached letters section has many of these examples included.

⁸ Estimated number of locations provided by the FCC at the time of award. Actual number of locations subject to future walkout, design, engineering and other verification.

These areas also cannot access telehealth services and could not access some government services during the pandemic that were only offered virtually. Dane County Department of Human Services recently noted during a meeting with the county executive that virtual meetings made some of their team member services and check-ins much more efficient because they did not have to drive to every resident check-in or appointment, something not available in areas in the eastern part of the county with little to no internet service. Finally, helping more rural Dane County residents have access to telecommuting will help Dane County achieve our climate goals faster.

Economic impact the project could have for an individual business located in the project area.

Our partners from Dane County offer the following input:

Having increased speeds will help residents trying to run businesses out of their homes. The town of Berry surveyed their residents about broadband access and had numerous comments about the problems home-based businesses have due to slow internet speed and unreliable services. Comments included: “I am trying to run a business from home and struggle with adequate speed and availability. It affects my ability to fax as well since I used an internet-based fax service” and “We do run our business from home as well as complete education courses, it is difficult and impossible to video conference” and “I run a direct sales business and experience lags and lost connections.”

How an improved download and upload transmission speed could better support a specific business in the project area.

Our partners from Dane County offer the following input:

Much of this area is agriculture-based businesses and farms, which rely more and more on internet services. Numerous farming groups such as the Farm Bureau say rural broadband is essential to modern agriculture and a recent study from Purdue University noted that farms could contribute billions more to the U.S. economy if they had access to internet services. Home-based businesses also would benefit from better service as one business in Berry recently noted on a survey: “There is no option I am aware of to obtain faster speeds than this. I am trying to run a business from home and struggle with adequate speed and availability.”

How improved broadband service could impact residential property values, supported by local sales data if available.

Our partners from Dane County offer the following input:

The Dane County housing market has been very competitive for some time now and buyers often get outbid due to limited supply in some areas. Faster and more reliable internet services would open up housing opportunities in the rural areas of Dane County for younger, first-time homebuyers. This generation expects internet services and likely won’t consider housing options without strong broadband services.

How improved broadband service to a residential portion of the project could benefit a telecommuting population.

Our partners from Dane County offer the following input:

Last year Dane County Executive Joe Parisi announced the county is working toward allowing up to one-third of their employees continued work at home options and many employees living in the residential

areas for this application simply cannot take advantage of this opportunity because of their limited internet options. This is also true for employees of Dane County businesses who live outside of Madison and the surrounding suburbs.

How the speeds and service being offered by the project fits with current and future economic needs of the community and local businesses.

Our partners from Dane County offer the following input:

Faster, reliable internet speeds would allow more residents to start a business at home or grow one they already have. It would also allow the many agriculture-based ventures in this area to be more efficient and increase profits. Many of the communities in these three areas simply cannot compete for businesses looking to expand or relocate due to a lack of fast, reliable internet services.

How the proposed project will affect the ability of individuals to access health care service from home, including any impact upon the costs of those services.

Our partners from Dane County offer the following input:

The pandemic increased the use of telemedicine dramatically and many health care providers and agencies have indicated they intend to continue using it. For example, the WI DHS recently announced they will continue their Medicaid telehealth expansion after the public health emergency ends and an article in the Wisconsin State Journal noted that telehealth is here to stay for many Dane County hospitals and clinics. Residents in the three areas of this application will not be able to take advantage of these services due to limited internet options.

Charter's proposed FTTP network is well suited for bandwidth-intensive applications like telemedicine. Charter's FTTP network would enable customers to engage in virtual doctor visits without leaving their homes. Accordingly, telehealth is a promising approach to reduce health disparities in rural communities by bringing specialized healthcare to these communities where such care was previously unavailable. Telehealth also facilitates monitoring and follow-up care for chronic health conditions, and connecting providers in remote areas, mental health services, and access to online pharmacies. Local public health departments can also leverage telehealth approaches to better serve their communities.

How the proposed project will affect the ability of students to access educational opportunities from home.

Our partners from Dane County offer the following input:

The pandemic exposed just how many rural areas in Dane County suffer from slow and unreliable internet services when children were forced to attend school virtually. Numerous school districts surveyed by the Dane County Board reported how difficult it was to ensure all of their students had access to the internet at home. For example, the Wisconsin Heights school district, which has students in the towns of Vermont and Springfield, noted that "we have areas where access is certainly an issue. In some instances, hotspots do not work that well either because of cell reception issues." And some parents in the town of Berry were forced to rent office space to get strong enough internet services to attend virtual school. Even though classes are in-person now, these students are still at a disadvantage when it comes to doing homework. Likewise, adults trying to attend college courses, certification classes, or professional development courses online are at a disadvantage.

A description of how the proposed project will affect the ability of individuals to access health care service from home, including any impact upon the costs of those services.

g. Effect upon broadband service to adjacent areas

This proposed project will not impair the ability of a broadband service provider or competing broadband service provider to extend broadband service to areas adjacent to the proposed project area.

III. Additional information supporting the application

a. Charter's History and Experience

Across the nation and in Wisconsin, Charter is a leading connectivity company providing superior products and services through its Spectrum brand of services and investing in the infrastructure, technology, and people powering the future. Charter is at the intersection of technology and entertainment, facilitating communications that connect more than 32 million residential and business customers in 41 states. Charter's commitment to serving customers and exceeding their expectations is the bedrock of Spectrum's business strategy and is the philosophy that guides its 93,000+ employees (that includes the approximately 3,600 employees who call Wisconsin home).

Nationally, Charter is the second largest broadband provider. The company has achieved growth through innovation and acquisitions of cable properties, including completing transactions with Time Warner Cable and Bright House Networks. U.S. News and World Report recently named Spectrum Internet as the **"Best Internet Service Provider for Rural Areas."**⁹ Charter's commitment to service quality has resulted in Multichannel News naming its Spectrum brand as **Operator of the Year for 2020**, CableFax naming us **"2021 MSO of the Year,"**¹⁰ and CNET naming Spectrum the **"Best Cable Internet Provider"** for 2022.¹¹ Spectrum's unparalleled commitment to service quality was especially evident in response to the pandemic. Charter's network continued to perform well despite higher levels of peak bandwidth usage. And Charter accomplished all this while making adjustments to how and where we worked in response to COVID protocols.

Charter has invested nearly \$40 billion in infrastructure and technology over the last five years as part of its long-term commitment to expanding broadband access across urban, suburban and rural areas to connect more Americans. From 2018-2020 alone, Charter extended its network to reach an additional 2.5 million new homes and businesses, about a third in rural areas. Charter has recently announced a \$5 billion dollar initiative through RDOF to connect more than a million currently-unserved, mostly rural families and small businesses to reliable broadband service with speeds of up to 1 gigabit per second, including adding significant resources to its construction department focused solely on adding nearly 115,000 miles of new network infrastructure to its more than 750,000 existing miles. Charter also plans

⁹ U.S. News and World Report, *Best Internet Providers for Rural Areas* (July 8, 2021), <https://www.usnews.com/360-reviews/internet-providers/best-rural>

¹⁰ <https://www.cablefax.com/event/2021-cablefax-top-ops>

¹¹ <https://www.cnet.com/home/internet/best-cable-internet/>

to hire more than 2,000 employees and contractors to support the expansion nationwide. Wisconsin is the state where Charter received its largest RDOF award.

Charter will use the same network deployment and operational procedures in the Project Area that are currently successfully employed across the country. These practices include documented and thoroughly tested methods of managing network performance, managing service issues at a network or customer level, and coordinating change management with minimal or no disruption to customers. All of Charter's services are delivered over its state-of-the-art network and Charter backs them up with professional customer service and support from local technicians. Charter is dedicated to bringing its clients innovative, reliable services, and responsible care.

In Wisconsin, Charter (and its predecessor companies) have been providing broadband internet service for decades. Charter currently serves over 800 communities in Wisconsin, and provides broadband internet, video and voice service to more than 1.5 million customers, operating more than 40,000 miles of plant. In 2021 Charter began its commitment to build more than 140,000 new, unserved locations in Wisconsin through RDOF. More than \$668 million will be invested in Wisconsin, which includes an expected private investment of approximately \$500 million by Charter and \$168 million in support won by Charter in the FCC's RDOF auction. For this Project, Charter will be able to draw on the experience and capabilities of its regional and local personnel building and maintaining broadband infrastructure in all of these efforts.

As stated above, Charter has extensive experience building new network across 41 states every year, including deployment of its network into unserved rural areas, is well informed and practiced in adhering to required permitting processes and laws, and has well-established procedures to ensure that its networks are always constructed consistent with all applicable legal and regulatory requirements.

Charter's construction project management system, called PRISM, contains an exhaustive guided workflow to manage all aspects of the construction process, including all necessary federal, state, and/or local governmental permits and approvals. The PRISM permit module enforces strict adherence to permitting rules, ensuring that steps in construction do not proceed without verified and approved permit documentation present in the system. Training is conducted frequently by a dedicated training group in Charter's Field Engineering support organization to ensure Charter's Construction Coordinators are well versed on the business processes and systemic solutions that projects are managed effectively and efficiently.

Prior broadband expansion projects

Charter recognizes the importance of extending broadband service to unserved and underserved rural Wisconsin. Since 2014, Charter has actively participated in the Wisconsin Public Service Commission State Broadband Grant Program and has received 17 broadband grant awards. Twelve of these grant projects have been completed and of the remaining five, one is expected to be completed in the spring of 2022 and the remaining four are expected to be completed by December 31, 2024. Through these public-private projects, thousands of previously unserved and underserved residents now have access to broadband.

The below chart provides a list of our successful public/private broadband expansion efforts in Wisconsin since 2018.

COMPLETED PROJECTS

Area	County	Community	Residential and Business Locations added	Activation date	Technology Used	Grant or Full Spectrum Investment
Pardeeville	Columbia	Village of Pardeeville	1045	Jun 2018	Hybrid Fiber Coax	Full Spectrum Investment
Dunn	Dane	Town of Dunn	117	Jun 2018	Hybrid Fiber Coax	State BB Grant
Fall River	Columbia	Village of Fall River	780	Mar 2019	Hybrid Fiber Coax	Full Spectrum Investment
King	Lincoln	Town of King	323	Jan 2020	Hybrid Fiber Coax	State BB Grant
Monticello	Green	Village of Monticello	567	Feb 2020	Hybrid Fiber Coax	Full Spectrum Investment
Orfordville & Footville	Rock	Villages of Orfordville & Footville	843	July 2020	Hybrid Fiber Coax	Full Spectrum Investment
Menominee	Menominee	Menominee Tribe	210	Dec 2020	FTTP	CARES Act Grant
Walter Dr - Woodruff	Oneida	Town of Woodruff	68	Dec 2020	Hybrid Fiber Coax	State BB Grant
Anson	Chippewa	Town of Anson	57	Dec 2020	Hybrid Fiber Coax	State BB Grant
Aedan Egan-Belgium	Ozaukee	Village of Belgium	19	Feb 2021	Hybrid Fiber Coax	State BB Grant
Strawberry Glen – Jackson	Washington	Town of Jackson	46	Feb 2021	Hybrid Fiber Coax	State BB Grant
Fairwater – Ripon	Fond du Lac	Town of Ripon	185	May 2021	Hybrid Fiber Coax	State BB Grant
Lake Michigan Dr – Sturgeon Bay	Door	Sturgeon Bay	134	Jun 2021	FTTP	State BB Grant
Marquette	Green Lake	Village of Marquette	164	Aug 2021	Hybrid Fiber Coax	State BB Grant
Randolph	Columbia	Village of Randolph	837	Oct 2021	Hybrid Fiber Coax	State BB Grant
Lyons	Walworth	Town of Lyons	53	Nov 2021	Hybrid Fiber Coax	State BB Grant
Menominee Phase 2	Menominee	Menominee Tribe	26	Dec 2021	FTTP	CARES Act Grant

PROJECTS IN PROGRESS

Area	County	Community	Residential and Business Locations added	Deadline to complete	Technology Used	Grant or Full Spectrum Investment
Eagle River – Silver Lake, Rangeline & Deerskin	Vilas	Towns of Washington & Lincoln	705	Summer 2022	FTTP	State BB Grant
Racine	Racine County	Countywide	2000	December 31, 2024	FTTP	State BB Grant
Kenosha	Kenosha County	Countywide	918	December 31, 2024	FTTP	State BB Grant
Walworth	Walworth County	Countywide	1648	December 31, 2024	FTTP	State BB Grant
Town of Janesville	Rock	Town of Janesville	39	December 31, 2024	FTTP	State BB Grant

b. A description of how the proposed project will or will not duplicate existing broadband infrastructure.

Charter will not build to any existing locations already served by Charter. Moreover, all of the locations proposed for the Project are either “unserved” or “underserved” as defined in Wis. Stat. § 196.504, so the Project does not duplicate any other provider’s existing infrastructure in any “served” area.

c. A description of an applicant’s financial ability to undertake the proposed broadband construction project.

Charter’s proposed Project budget includes only a limited set of Charter’s estimated direct, verifiable costs of construction. These consist of estimated material costs; direct contractor labor to carry out design, make-ready, and construction work; and licensing/permitting expenses. Indirect costs and certain other direct costs associated with the effort—such as the contributions by Charter’s internal employees on project design, supervision, and management—will be absorbed by Charter as part of its regular operations.

Once constructed, the State can also have a high degree of comfort that the Project will be sustainable. The network will also be backed and operated by Charter, the nation’s second-largest broadband provider with extensive experience owning, operating, maintaining, and upgrading broadband networks, as well as well-recognized financial stability. Charter has substantial cash flow, revolver capacity, and access to the capital markets. Charter’s financial resources and recognized, investment-backed commitment to rural America provide reassurance that Charter will be able to carry out the terms of any grant and continue to operate the system going forward.

Charter Communications, Inc., the company behind the customer-facing brand of Spectrum, is a Fortune 70 company with a market capitalization near \$100 billion. All portions of the project to be funded by Charter will be funded from the company’s general construction budget. Full copies of Charter’s most recent financials can be accessed here:

- Annual Report to Shareholders: <https://ir.charter.com/financial-information/annual-reports>
- SEC Filings: <https://ir.charter.com/financial-information/sec-filings>

- Annual Form 10-K for year ended December 31, 2021: <https://ir.charter.com/static-files/63606f63-1b11-4d60-91a0-5395f1552592>

Charter funds its construction projects using a centralized holding company planning model. For the proposed Project, Charter will aggregate needs and accumulate funds at the holding company level using a mix of available funding pools, including ongoing business free cash flow, existing credit lines, and new bond issuances, which could include high yield or investment grade bonds similar to those in our debt structure today. Our goal is to mix these resources as efficiently as possible. We continually evaluate our collective funding need and utilize funding mechanisms based on what is currently most advantageous for Charter. Our centralized funding entities will then disperse funds to the Charter affiliate participating in the Project to fund the Project on an as needed basis.

Charter has more than adequate cash flow to meet all Project obligations, including both initial construction and ongoing operation of the proposed network. Charter's free cash flow generally reflects the cash flow from our business that is available for investment, debt repayment, or for distribution to our shareholders in a given year. Free cash flow has already been reduced for our expected interest payments and normal capital expenditures. Charter's free cash flow in 2018, 2019, 2020, and 2021 was \$2.2b, \$4.6b, \$7.1b, and \$8.7b, respectively. Collectively, our free cash flow, revolver capacity, and access to capital markets reflect more than sufficient resources to fund the proposed Project. In addition, consensus estimates of our ongoing free cash flow would be more than sufficient to fund our debt maturity obligations as they come due, along with allowing us to continue to operate our business, including the build-out systems.



March 17, 2022

Ms. Steffany Powell Coker
Secretary to the Commission
Public Service Commission of Wisconsin
4822 Madison Yards Way
North Tower - 6th Floor
Madison, WI 53705-9100

RE: FY 2022 BROADBAND EXPANSION GRANT APPLICATION

Dear Ms. Coker:

In response to The Fiscal Year 2022 Broadband Expansion Grant Cycle in collaboration with Spectrum Mid-America, LLC, by its manager, Charter Communications Inc. Charter ("Spectrum" or "Charter") hereby submits the enclosed Application, which we believe appropriately recognizes the urgency of the request and sets forth a straight-forward implementable plan to connect the most unserved and underserved homes utilizing the available funding.

Our proposal, if accepted, will deliver robust high speed internet with up to 1 gigabit per second ("Gbps") download and 500 megabits per second ("Mbps") upload speeds, to 1,000 locations identified in Spectrum's Application in Dane County, using fiber-to-the-premises (FTTP EPON) technology.

Charter has invested nearly \$40 billion in infrastructure and technology nationally over the last five years as part of its long-term commitment to expanding broadband access across urban, suburban and rural areas to connect more Americans. In 2021, Charter extended its network to reach an additional 1.1 million new homes and businesses across the country, including an additional 41,000 in Wisconsin.

Backed by more than 3,591 local employees, \$670 Million in capital investment in Wisconsin over the last two years, and a robust gigabit capable network, we are uniquely positioned to meet your objectives in a more efficient and meaningful way than any other applicant.

Charter recognizes the urgent need for extending access to reliable broadband to all its residents. Charter, through its Spectrum brand of companies, currently serves approximately 1.5 million customers in Wisconsin, and more than 32 million customers nationwide. Over an advanced communications network, the company offers a full range of state-of-the-art residential and business services including Spectrum Internet, TV, Mobile and Voice.

Our continued commitment to providing broadband in the State is further evidenced by our 2021 announcement to build more than 140,000 unserved locations in Wisconsin through the Federal Communications Commission's Rural Digital Opportunity Fund ("RDOF") auction. More than \$668 million will be invested in Wisconsin, which includes an expected private investment of approximately \$500 million by Charter and \$168 million in support won by Charter in the FCC's RDOF auction. In Dane County we will be building 4,612 locations.

Each day that passes without connectivity increases the gap between those who have broadband and those who do not. We believe this proposal echoes the State's strong desire to bring connectivity to unserved and underserved residents of the state. Charter is excited for the opportunity to work with the Wisconsin Public Service Commission to bring continued major investment of broadband expansion in the State.

Please find the detail of our response enclosed. Again, we are pleased to be considered for such an important and ambitious project. Thank you for your leadership on this critical issue.

Sincerely,

A handwritten signature in black ink, appearing to read 'AR', with a stylized, flowing script.

Adam Raschka,
Regional Senior Director, Government Affairs



WISCONSIN LEGISLATURE

P.O. BOX 8952 • MADISON, WI 53708

March 11, 2022

Mr. Dennis Klaila
Wisconsin Broadband Office
Public Service Commission of Wisconsin
4822 Madison Yards Way
P.O. Box 7854
Madison, WI 53705-9100

Dear Mr. Klaila,

We are writing today to express support for the Charter Communications Grant Application for broadband internet expansion in the 27th Senate District and 80th Assembly District.

As you are well aware, many Wisconsinites still struggle to find access to reliable broadband internet. Work and education during the pandemic have made it even more clear how vital broadband access is, and this is an opportunity to address that continuing need.

It is crucial that we do everything we can to assure that all citizens, regardless of where they live in our state, have a reliable internet connection. With the Public Service Commission's support, 1,000 homes and businesses in Dane County will have access to fiber-to-the home broadband. In addition to Charter's investment and their grant application, Dane County has also demonstrated their commitment to this project by providing \$1 million towards the construction if awarded.

Broadband internet has transitioned from being a luxury to a basic necessity, and we strongly support this opportunity for reliable access to high-speed internet. We support Charter Communications' application for a broadband expansion in Dane County and hope the Commission will approve this grant application. We welcome the opportunity to discuss our support for this project at your convenience and thank you for your consideration.

Sincerely,

Jon Erpenbach
State Senator
27th Senate District

Sondy Pope
State Representative
80th Assembly District



March 14, 2022

To: Wisconsin Public Service Commission

Re: Broadband Expansion Grant

To Whom It May Concern,

With this letter, the Madison Region Economic Partnership (MadREP) is writing to support the application of Dane County to the Wisconsin Public Service Commission (PSC) for a Broadband Expansion Grant.

MadREP is the lead economic development agency for the eight-county Madison Region, which includes the counties of Columbia, Dane, Dodge, Green, Iowa, Jefferson, Rock, and Sauk. MadREP works with partners at the municipal and county levels throughout this region to create a dynamic environment where people and businesses can thrive. To do so in today's world of global competition, it has become necessary for both individuals and businesses to have access to broadband internet. As such, MadREP is committed to supporting broadband development projects across our eight-county region.

Despite being home to the state capital and the flagship campus of the University of Wisconsin, Dane County still has geographic pockets in rural areas that are underserved in terms of broadband access. Residents in these areas may have only one internet service provider (or zero) to choose from for consistent access that is always on with at least a speed of 25 megabits for download and 3 megabits for upload.

It is our understanding that approximately 1000 locations in western and southwestern Dane County have been identified as underserved by broadband access and therefore eligible for the current round of PSC grant funding. It is further our understanding that an internet service provider has projected the cost to expand service to these locations to be approximately \$10.3 million, which includes installing 192.8 miles of fiber to reach each location in the project area. Finally, it is our understanding that in addition to investment by the internet service provider, Dane County intends to utilize American Rescue Plan Act (ARPA) funds previously received to supplement any grant funds received by the PSC to complete this project.

MadREP exists to promote and facilitate economic development in the Madison Region. Succinctly put, economic development cannot happen without access to broadband. With this in mind, we ask that you consider Dane County's grant application for funding for broadband expansion through the PSC. It has the full support of MadREP.

Thank you.

Sincerely,

Jason Fields, President & CEO
Madison Region Economic Partnership

Letters from town leaders



9046 State Road 19, Mazomanie, WI 53560, 608-767-4152, townberry@chorus.net

March 7, 2022

Stephanie Powell Coker
Secretary of the Commission
Public Service Commission
4822 Madison Yards Way
North Tower 6th Floor
Madison, WI 53705-9100

Dear PSC Broadband Expansion Grant Review Committee:

On behalf of the Town of Berry, I would like to express our support for the Charter Communications Wisconsin Broadband Expansion Grant Application ("Application") in Dane County as provided in the Dane County Broadband Task Force ("Task Force") Resolution 2021 RES-382. We support the Dane County Board of Supervisors commitment to this Broadband project.

Based on the Resolution, a portion of the project will include the Town of Berry currently served by Mid-Plains Telephone, LLC. TDS ("Mid-Plains"). For years the Town has requested that Mid-Plains upgrade the Broadband service. Recent discussion with Mid-Plains indicated that they do not have any plans at this time to upgrade the service.

The Town has received numerous complaints from residents about the lack of reliable high-speed Broadband service in the portion of the Town served by Mid-Plains. Since we are the beginning of the Driftless area of Wisconsin, we have hills and valleys that make Satellite Internet, and cell phone service, spotty, at best. If you are on the wrong side of the hill, you get nothing.

At the November 15, 2021 Town Board Meeting the Board voted to move forward with a survey to determine the availability of reliable broadband service in the Town.

The Town received 120 responses to the Broadband Survey, of their responses 88 indicated that they lived in the portion of the Town served by Mid-Plains. Of those 88 responded, over 35 indicated that their Broadband speed was less than 5 Mbps download transmission. The majority of the Town in the portion serviced by Mid-Plains is either unserved or underserved.

Town Of **SPRINGFIELD**

6157 County Hwy P. Dane, WI 53529
townhall@town.springfield.wi.us

Phone 608-849-7887
www.town.springfield.wi.us

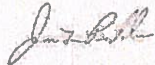
March 8, 2022

Mike Hill
Senior Government Affairs Manager
Charter Communications
1201 McCann Dr
Altoona WI 54720

Mr. Hill,

The Town of Springfield strongly supports the broadband expansion being proposed by the Dane County Broadband Task Force in partnership with Charter Communications and the funding application being submitted to the Wisconsin Public Service Commission's Broadband Expansion Grant. Springfield's residents are at a disadvantage with limited internet capability due to older cable and switching stations. Springfield's residents, businesses and schools continue to rely on old copper lines with increased speeds in certain areas only achievable by combining multiple phone lines together; a band-aid solution not a permanent fix to deliver fast, reliable internet. Current speeds do not allow for modern business and academic operations, nor support the large number of residents required to work and attend school from home.

Sincerely,



James Pulvermacher
Town of Springfield Chair

Responses from school districts

Mount Horeb

Hotspots were given to students. Since hotspots are expensive and in short supply, hotspots were not given to all students as we had to prioritize based on a families financial abilities, their ability to access broadband through local providers in the coverage area, and how many students were in each rural home.

I'd like to add that our Board of Education approved a partnership with Mount Horeb Telephone Company to provide Internet access to qualifying families in which their connection is routed through our network, but in some cases families have been able to upgrade or change providers for a more reliable connection. We have a large rural family population in our district and many areas have little to no options for high speed internet and this is where I see the greatest needs for broadband expansion. We would support any provider in our coverage area that is trying to improve/expand Internet access for our district's families, running new fiber optics to remote rural locations, and/or upgrading existing services for both in-town and rural residents.

If I can be of any further help, please let me know.

Josh Cataldo

District Technology Coordinator

Mount Horeb Area School District

1304 E Lincoln St, Mt Horeb, WI 53572

Wisconsin Heights

We have given out approximately 70 hotspots. I know in our school district we have areas where access is certainly an issue. In some instances, hotspots do not work that well either because of cell reception issues.

Thanks,

Mr. Jordan Sinz

District Administrator

Wisconsin Heights School District

Responses from some residents of these areas

From: Maureen Lokrantz <maureen.lokrantz@gmail.com>
Sent: Thursday, February 10, 2022 7:19 PM

To: Dane Broadband Task Force
Subject: Public input

We purchased a home in the Town of Cross Plains 6 years ago. We are a mere 7 miles west of the Beltline and 3 miles from the Village of Cross Plains. Our road also pays a large portion of property taxes in the area. We unfortunately have no access to cable or satellite and instead have to rely on a very limited cellular plan for internet access.

What is not, but we believe should be available: Unlimited usage or bandwidth, faster down and upload speeds, and a reliable connection. We have yet to find any option available that provides any of these. Thank you for seeking public input.

Maureen and Tim Lokrantz
M A Lokrantz - Sent from my iPad

From: Bob Gustafson <rjgustafson2@gmail.com>
Sent: Wednesday, February 16, 2022 9:50 PM
To: Dane Broadband Task Force
Subject: Lack of Broadband Access

Hello,

We live in a house at 4142 Barlow Road, Cross Plains, WI 53528. We have been struggling with DSL internet from TDS ever since we moved here 17 years ago. Working from home is nearly impossible, especially when the Middleton-Cross Plains school district was fully online.

We typically only have 1-3 MB/sec download speeds which is not enough to work from home effectively and pay \$87 per month for terrible service. We are very frustrated that we live 10 minutes from Madison and cannot get broadband internet. We own a cabin outside of Phillips, WI at the end of a 3-mile gravel road with no electricity. However, fiber optic internet is now available there and virtually everywhere in Price County, but not at my home in Dane County. Please try to help people like us to have affordable broadband internet available ASAP.

Thanks,
Bob and Marty Gustafson

Letter from Business Organization – Mad Rep



MADISON REGION
ECONOMIC PARTNERSHIP

March 14, 2022
To: Wisconsin Public Service Commission
Re: Broadband Expansion Grant

To Whom It May Concern,

With this letter, the Madison Region Economic Partnership (MadREP) is writing to support the application of Dane County to the Wisconsin Public Service Commission (PSC) for a Broadband Expansion Grant.

MadREP is the lead economic development agency for the eight-county Madison Region, which includes the counties of Columbia, Dane, Dodge, Green, Iowa, Jefferson, Rock, and Sauk. MadREP works with partners at the municipal and county levels throughout this region to create a dynamic environment where people and businesses can thrive. To do so in today's world of global competition, it has become necessary for both individuals and businesses to have access to broadband internet. As such, MadREP is committed to supporting broadband development projects across our eight-county region.

Despite being home to the state capital and the flagship campus of the University of Wisconsin, Dane County still has geographic pockets in rural areas that are underserved in terms of broadband access. Residents in these areas may have only one internet service provider (or zero) to choose from for consistent access that is always on with at least a speed of 25 megabits for download and 3 megabits for upload.

It is our understanding that approximately 1000 locations in western and southwestern Dane County have been identified as underserved by broadband access and therefore eligible for the current round of PSC grant funding. It is further our understanding that an internet service provider has projected the cost to expand service to these locations to be approximately \$10.3 million, which includes installing 192.8 miles of fiber to reach each location in the project area. Finally, it is our understanding that in addition to investment by the internet service provider, Dane County intends to utilize American Rescue Plan Act (ARPA) funds previously received to supplement any grant funds received by the PSC to complete this project.

MadREP exists to promote and facilitate economic development in the Madison Region. Succinctly put, economic development cannot happen without access to broadband. With this in mind, we ask that you consider Dane County's grant application for funding for broadband expansion through the PSC. It has the full support of MadREP.

Thank you.

Sincerely,
Jason Fields, President & CEO
Madison Region Economic Partnership

Maps from Map Rep Speed Testing

Dane County

Download

Upload

Min	Max	Med	Mbps
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No service reasons: may total >100%



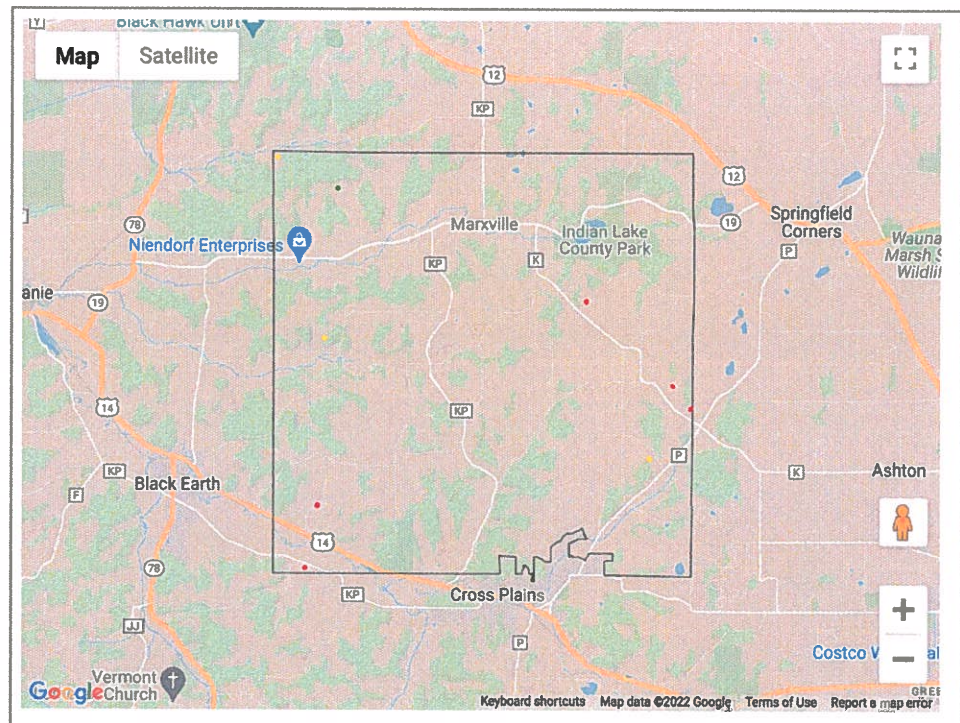
Berry town

Download

Upload

Min Max Med Mbps

No service reasons: may total >100%



Perry town

Households	399
Population	1,175
Test locations	13
Total Tests	23
Percent participation	3.26%
Participation goal (10%)	40

Download

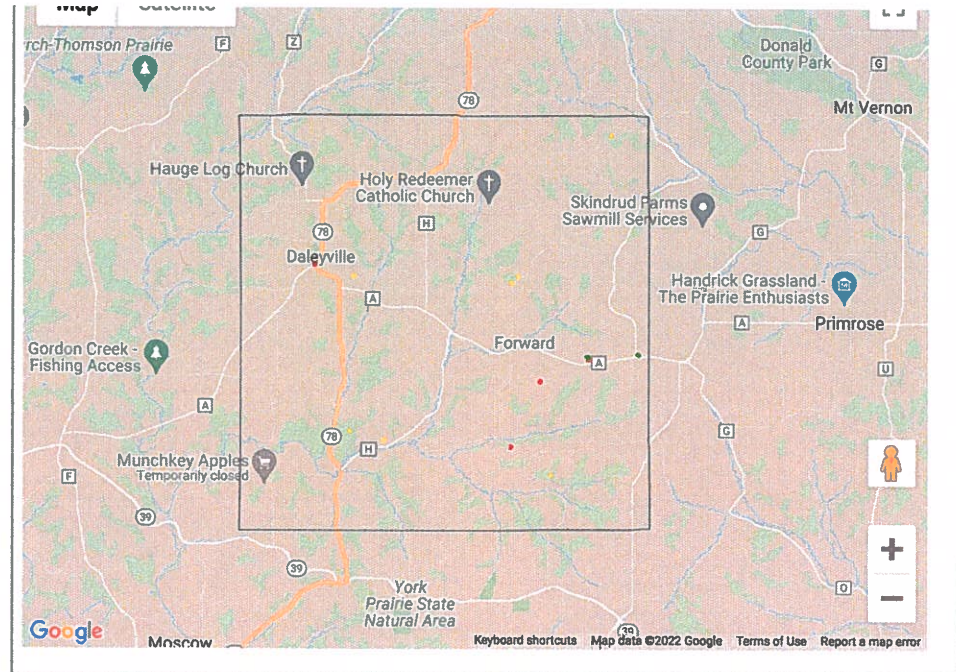
No Service	0	0.0%
<0-10 Mbps	4	30.8%
10-25 Mbps	7	53.8%
25-150 Mbps	2	15.4%
150+ Mbps	0	0.0%

Upload

No Service	0	0.0%
<3 Mbps	11	84.6%
3-10 Mbps	1	7.7%
10-25 Mbps	1	7.7%
25-150 Mbps	0	0.0%
> 150 Mbps	0	0.0%

	Min	Max	Med Mbps
Download	4.87	87.90	12.85
Upload	0.45	14.41	0.97

No service reasons: may total 100%



Fixed 13 locations

Download		Upload	
No Service	0 0.0%	No Service	0 0.0%
0-10 Mbps	4 30.8%	<3 Mbps	11 84.6%
10-25 Mbps	7 53.8%	3-10 Mbps	1 7.7%
25-150 Mbps	2 15.4%	10-25 Mbps	1 7.7%

Cellular 0 locations

Download		Upload	
0-10 Mbps	0 nan%	<3 Mbps	0 nan%
10-25 Mbps	0 nan%	3-10 Mbps	0 nan%
25-150 Mbps	0 nan%	10-25 Mbps	0 nan%
150+ Mbps	0 nan%	25-150 Mbps	0 nan%

Print this page

Springdale town

Households	895
Population	2,581
Test locations	102
Total Tests	204
Percent participation	11.40%
Participation goal (10%)	90

Download

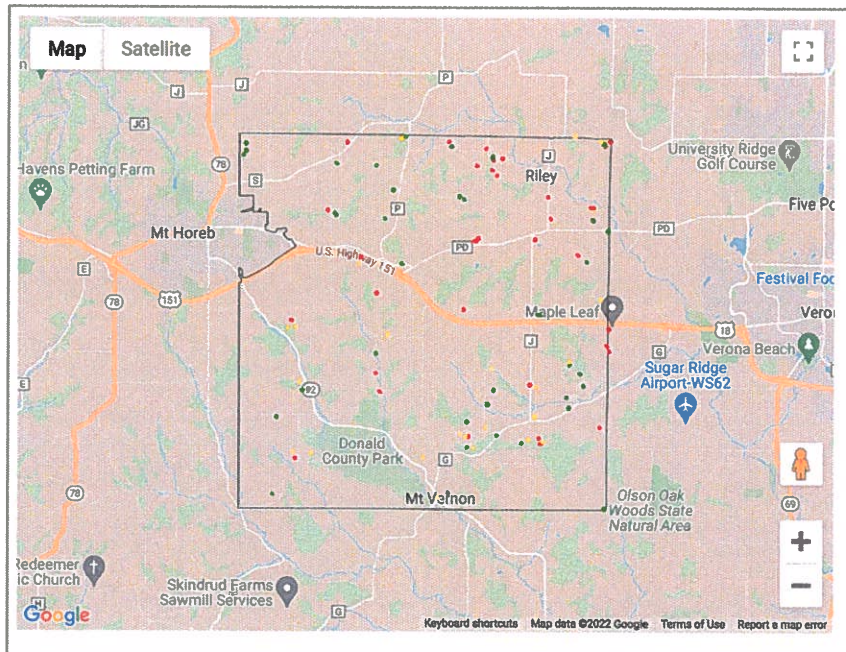
No Service	0	0.0%
<0-10 Mbps	36	35.3%
10-25 Mbps	27	26.5%
25-150 Mbps	34	33.3%
150+ Mbps	5	4.9%

Upload

No Service	0	0.0%
<3 Mbps	53	52.0%
3-10 Mbps	31	30.4%
10-25 Mbps	11	10.8%
25-150 Mbps	3	2.9%
> 150 Mbps	4	3.9%

	Min	Max	Med Mbps
Download	0.31	312.49	12.95
Upload	0.30	407.29	2.40

No service reasons: may total 100%



Fixed 94 locations

Download		Upload	
No Service	0 0.0%	No Service	0 0.0%
0-10 Mbps	35 37.2%	<3 Mbps	51 54.3%
10-25 Mbps	25 26.6%	3-10 Mbps	26 27.7%

Cellular 8 locations

Download		Upload	
0-10 Mbps	1 12.5%	<3 Mbps	2 25.0%
10-25 Mbps	2 25.0%	3-10 Mbps	5 62.5%
25-150 Mbps	4 50.0%	10-25 Mbps	0 0.0%

Print this page

Vermont town

Households 446
Population 1,310
Test locations 5
Total Tests 6
Percent participation 1.12%
Participation goal (10%) 45

Download

* No Service 0 0.0%
* 0-10 Mbps 1 20.0%
10-25 Mbps 1 20.0%
* 25-150 Mbps 3 60.0%
* 150+ Mbps 0 0.0%

Upload

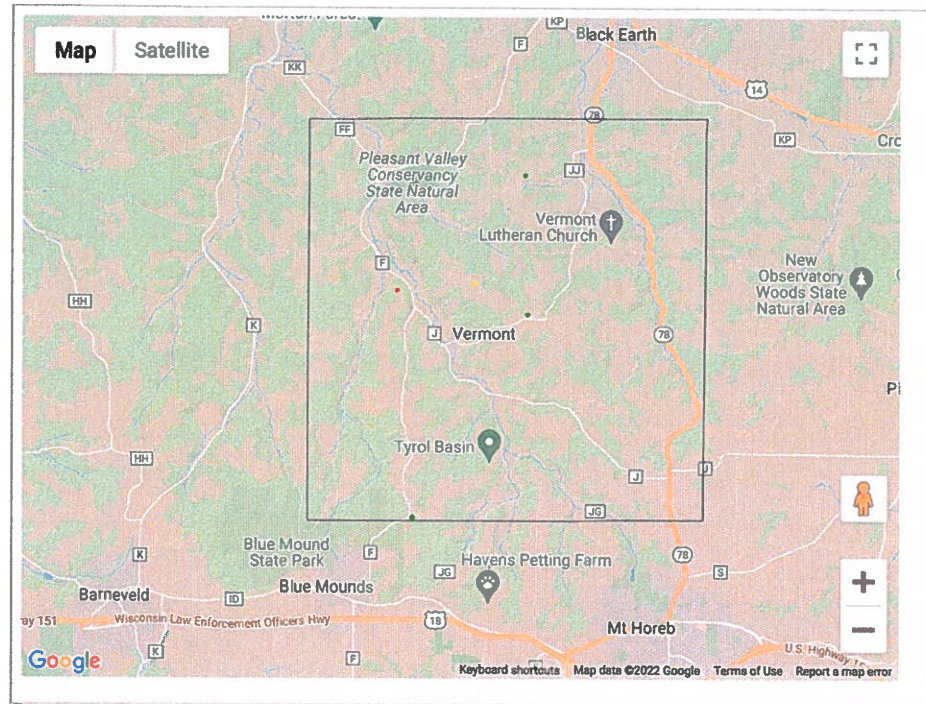
No Service 0 0.0%
<3 Mbps 2 40.0%
3-10 Mbps 1 20.0%
10-25 Mbps 1 20.0%
25-150 Mbps 1 20.0%
> 150 Mbps 0 0.0%

Min Max Med Mbps

Download 0.44 87.47 26.01

Upload 0.94 38.19 5.26

No service reasons: may total > 100%



Fixed 5 locations

Download		Upload	
No Service	0 0.0%	No Service	0 0.0%
0-10 Mbps	1 20.0%	<3 Mbps	2 40.0%
10-25 Mbps	1 20.0%	3-10 Mbps	1 20.0%

Cellular 0 locations

Download		Upload	
0-10 Mbps	0 nan%	<3 Mbps	0 nan%
10-25 Mbps	0 nan%	3-10 Mbps	0 nan%
25-150 Mbps	0 nan%	10-25 Mbps	0 nan%